# **Subject Index**

# A

A-91, A-144, A-145, A-192, and A-195 (amino acid derivatives), activity against various tumor systems, 309

1-Acetyl-2-picolinoylhydrazine (NSC-68626), in children with various malignant neoplasms, 341

Acronycine (NSC-403169), evaluation in the C1300 murine neuroblastoma model, 975

Actinomycin D (NSC-3053)

combined with procarbazine and vinblastine in the treatment of malignant melanoma, 767

combined with vincristine and alternating with adriamycin in the treatment of advanced sarcomas, 1035

combined with vincristine and cyclophosphamide with or without radiation therapy in the treatment of childhood rhabdomyosarcoma, 359

single dose toxicity of, in dogs, 447

tissue disposition of, in the rat, monkey, and dog, 1061

Acute Leukemia Group B see Cooperative groups

ADJ/PC6A tumor see Tumor systems, mice

Adriamycin (NSC-123127)

alternating with the combination of vincristine and actinomycin D in the treatment of advanced sarcomas, 1035

antitumor activity and cardiotoxicity of, another hypothesis, 258

cardiac uptake of, not affected by strophanthin G, 765 combined with DTIC in the treatment of advanced, childhood, stage IV neuroblastoma, 1015

compared with 5-FU plus cyclophosphamide in the treatment of advanced prostatic cancer, 203

compared to 5-FU in the treatment of advanced colorectal cancer, 405

compared with 5-FU in the treatment of advanced prostatic cancer, 215

contact dermatitis associated with, 677

DNA complexes of, 260

effect of temperature on drug uptake by leukemic leukocytes in vitro, 985

enhancement of the effectiveness of, against early mouse L1210 leukemia with ICRF-159, 689

evaluation in the C1300 murine neuroblastoma model, 975

new model for studying the effects of, on the growth of the prostate gland in rats, 185

phase I study, combined with 5-FU in the treatment of breast cancer and other solid tumors, 1163

preliminary pharmacokinetic model for, 819

toxicologic screening in rats, 707

in the treatment of advanced gastrointestinal cancer, 405

in the treatment of alkylator-resistant multiple myeloma, 345

treatment of MAC-13 and MAC-15, adenocarcinomas of the colon in mice, 1083

in the treatment of metastatic melanoma, 1181

used in potential test systems in animals to determine activity against prostatic carcinoma, 175

Adriamycin-DNA (NSC-169534), comparison of different formulations, 260

Adriamycin, 14-octanoate, hydrochloride (NSC-149584), toxicologic screening in rats, 707

AH13 hepatoma see Tumor systems, rats

AH60C hepatoma see Tumor systems, rats

AH7974 hepatoma see Tumor systems, rats

AKR lymphoma see Tumor systems, mice

Aluminum nitrate (NSC-143017), toxicity and antitumor activity in experimental rodent tumors, 599

Amino acid derivatives, antitumor activity of, against various tumor systems, 309

L-{aS,5S}-a-amino-3-chloro-4,5-dihydro-5-isoxazoleacetic acid (NSC-163501), a new amino acid antibiotic with the properties of an antagonist of L-glutamine, as an inhibitor of mammalian and bacterial reactions, 481

# Amygdalin MF (NSC-15780)

antitumor activity of, as a single agent and with  $\beta$ -glucosidase on a spectrum of transplantable rodent tumors, 939

experimental studies of the antitumor activity of, alone and combined with  $\beta$ -glucosidase, 951

Anhydro-ara-5-fluorocytidine (NSC-166641), evaluation of sialogogic action, 1019

# Announcements

Annual Meeting of the American Association for Cancer Research, Inc, 255

67th Annual Meeting of the American Association for Cancer Research, Inc 1205

Cancer Therapy Abstracts, 1047

Eighth World Congress of Gynecology and Obstetrics, 675, 1047

Examination of the American Board of Internal Medicine in the Subspecialty Area of Medical Oncology, 255, 455 Fellowships in Medical and Surgical Oncology, 455

First EORTC Breast Cancer Working Conference, 676 Fourth International Symposium on Senology, 675

Hematology/Oncology Fellowship, 1206

Immunology Symposium on "Applied Clinical Immunology," 1049

Johananoff International Fellowship for Advanced Biomedical Studies, 1049

Medical Oncology Course, 676, 883

Medical Oncology Fellowship, 1047

Memorial Sloan-Kettering Cancer Center Nursing Symposium, 883

Oncology Placement Service, 455, 675, 1205

Postdoctoral Fellowships in Drug Development, 1048

Postgraduate Course on "Immunology for the Practicing Physician." 884

Second Annual Meeting of the Association of Community Cancer Centers, 1048

Seventh New Drug Seminar: Nitrosoureas, 1048

Sixth New Drug Seminar: Dimethyl Triazeno Imidazole Carboxamide, 456

Symposium on Advances in Cancer Treatment Research, 1206

Symposium on Breast Cancer, 255

Symposium on Modern Concepts in Brain Tumor Therapy: Laboratory and Clinical Investigation, 883, 1205

Symposium on "The Non-Hodgkin's Lymphomas," 1205 Symposium on Steroid Hormone Action and Cancer, 676 Symposium on Tumor and Clinical Tumor Immunity, 456

Training Program in Medical Oncology, 675, 1047 Wisconsin Clinical Cancer Center Tenth National Con-

Workshop on Antimetabolites and the Central Nervous

System, 1048

Antiviral chemotherapy, as an adjunct to cancer chemotherapy, 261

Assay techniques

assay for citrovorum factor in the presence of methotrexate, 935

chemical assay to determine concentrations of inosine dialdehyde in biologic fluids, 685

microbiologic assay for cytosine arabinoside, using a mutant of Streptococcus faecium var. durans resistant to methotrexate and 6-MP, 515

new in vitro method for assaying colony-forming cells of Lewis lung carcinoma and B16 melanoma, comparison of effects of three nitrosoureas, 929

a useful biologic assay for tetrahydrouridine, a potent inhibitor of cytosine arabinoside deamination, 717

5-Azacvtidine (NSC-102816)

combined with methyl-GAG in previously treated adults with acute nonlymphocytic leukemia, 1043

enhancement by tetrahydrouridine of the oral activity of, in L1210 leukemic mice, 459

phase I study of, using a 24-hr continuous infusion for 5 days in the treatment of various cancers, 1123

В

Bacillus Calmette-Guérin

immunotherapy of prostatic cancer with, 157 for prostatic cancer in man, 251

BCG see Bacillus Calmette-Guérin

BCNU (NSC-409962)

analysis of the effects of, on cell cycle kinetics, 847 combined with cyclophosphamide in the remission maintenance of adult acute nonlymphocytic leukemia, 537 compared to methyl-CCNU and CCNU with regard to sensitivity of colony-forming cells of hemopoietic tissue, Lewis lung carcinoma, and B16 melanoma, 929 effect of, alone or combined with levamisole, on DNA syn-

thesis by lymphocytes from immunosuppressed C57BL mice, 531

evaluation in the C1300 murine neuroblastoma model, 975

treatment of MAC-13 and MAC-15, adenocarcinomas of the colon in mice, 1083

BIC (NSC-82196)

phase II clinical trial of, in primary and secondary brain tumors, 327

plus CCNU in patients with various disseminated solid tumors, 769.

in the treatment of childhood malignancy, 371

Bleomycin (NSC-125066)

alone or in combination with CCNU in the treatment of metastatic testicular cancer, 429

combined with CCNU in the treatment of MOPP-resistant Hodgkin's disease, 1147

combined with vincristine and methotrexate plus radiation therapy in the treatment of non-oat-cell bronchogenic cancer, 377

continuous iv therapy combined with vinblastine in stage III testicular neoplasia, 563

evaluation in the C1300 murine neuroblastoma model, 975

reversible penile calcifications associated with pulmonary toxicity induced by, 1039

in the treatment of metastatic liver cancer, 433

used in potential test systems in animals to determine activity against prostatic cancer, 175

B16 melanoma see Tumor systems, mice

Brain cancer see Cancer, brain

Brain tumor models see Tumor systems

Breast cancer see Cancer, breast

Bretylium tosylate (NSC-62164), unorthodox therapy for murine neuroblastoma with, 571

2-Bromo-a-ergocryptine (NSC-169774), clinical trial in the treatment of human prostatic cancer, 209

Bronchogenic carcinoma see Cancer, lung

Burkitt's lymphoma see Lymphoma, Burkitt's

Butyric acid (NSC-8415), unorthodox therapy for murine neuroblastoma with, 571

C

Calusterone (NSC-88536), antitumor activity of, in advanced breast cancer, 890

Cancer (nonhematologic)

brain

phase II study of methyl-CCNU, 1022

primary and secondary, phase II clinical trial of BIC in, 327

breast

advanced, antitumor activity of calusterone in the treatment of, 890

advanced, cyclophosphamide combined with cytosine arabinoside and methotrexate in the treatment of, 1091

cis-dichlorodiammineplatinum(II) alone and in combination in the treatment of, 647

combination chemotherapy for, 893

combinations of cyclophosphamide, vincristine, and 5-FU in the treatment of, 425

phase I study of 5-FU plus adriamycin in the treatment of, 1163

VP-16-213 given orally in the treatment of, 1027

bronchogenic, 5-FU compared to cyclophosphamide in the treatment of, 1025

colon

comparison of mitomycin C and 5-FU using hepatic arterial infusion for liver metastases resulting from,

vincristine plus 5-FU in the treatment of, 425 colorectal

advanced, adriamycin in the treatment of, 405

advanced, phase II study of chromomycin A<sub>3</sub> in, 577

advanced, phase II study of cytembena in, 581 advanced, phase II study of ICRF-159 in, 761

epithelial, phase I evaluation of cyclocytidine in the treatment of, 389

gastrointestinal

advanced, methyl-CCNU alone or in combination with cyclophosphamide in the treatment of, 1161

cis-dichlorodiammineplatinum(II) alone and in combination in the treatment of, 647

5-day iv infusion with 5-FU after weekly 5-FU failure,

phase II study of methyl-CCNU, 1021

VP-16-213 given orally in the treatment of, 1027 genitourinary

cis-dichlorodiammineplatinum(II) alone and in combination in the treatment of, 647

VP-16-213 given orally in the treatment of, 1027 head and neck

cis-dichlorodiammineplatinum(II) in the treatment of,

phase II study of methyl-CCNU, 1021

kidney, metastatic, vincristine combined with hydroxyurea in the treatment of, 1159

large bowel, metastatic, phase II trials with procarbazine, streptozotocin, 6-thioguanine, or CCNU in patients with, 333

lip, residual or relapsing, 5-FU applied in a mouthwash in the topical treatment of, 1052

liver, metastatic, clinical trial of bleomycin in the treatment of, 433

lung

advanced, cyclophosphamide combined with cytosine arabinoside and methotrexate in the treatment of,

chemotherapeutic response and iv hyperalimentation

cyclophosphamide in the treatment of, 411

epidermoid, phase I-II studies of emetine in the treatment of, 1171

non-oat-cell, bleomycin, vincristine, and methotrexate plus radiation therapy in the treatment of, 377

phase I study of guanazole in, 1117

phase I study of thalicarpine in, 1001 phase II study of methyl-CCNU in, 1021

small cell, methyl-CCNU, cyclophosphamide, and vin-

cristine in the treatment of, in a 3-week schedule, 1127 trials with NSC-140117, 367

VP-16-213 given orally in the treatment of, 1027

VP-16-213 in the treatment of, 737

cis-dichlorodiammineplatinum(II) in the treatment of,

combinations of cyclophosphamide, vincristine, and 5-FU in the treatment of, 425

phase II study of methyl-CCNU, 1021

recurrent or progressive, high-dose cyclophosphamide in the treatment of, 157

pancreas

combinations of cyclophosphamide, vincristine, and 5-FU in the treatment of, 425

5-FU in the treatment of: comparison of oral and iv routes, 1031

prostate

advanced, comparison of adriamycin and the combination of 5-FU and cyclophosphamide in the treatment

advanced, comparison of adriamycin and 5-FU in the treatment of, 215

advanced, comparison of 5-FU and cyclophosphamide in the treatment of, 195

advanced, stage D, oral estramustine phosphate in the treatment of, 219

characterization of, among blacks, 3

clinical trial of 2-bromo-a-ergocryptine in the treatment of, 209

collection of postmortem prostate tissue under sterile conditions, 91

cultivation of epithelial cells from the prostate to develop an immune cytotoxicity assay for, 147

detection of, 139

detection and diagnosis of: general discussion, 151

disaggregation of prostates and purification of epithelial cells from normal and cancerous prostates using sedimentation in an isokinetic density gradient of Ficoll in tissue culture medium, 143

etiology and prevention of, 65, 73, 89

extended-field radiation therapy for, 165

far-advanced, clinical results with estramustine phosphate: comparison of iv and oral preparations, 229 grading of, 111

immunotherapy of, with BCG, 157

investigation of specific antigens in, 105

monolayer cultures of human prostatic cells, 59 neoplastic effect of 3-methylcholanthrene on human

prostate in organ culture, 67 potential screening agents for, 119

potential test systems in animals to predict for activity against, 175

a review of clinical trials by the Veterans' Administration Cooperative Urological Research Group, 225

search for virogene in, 39

stage D, 5-FU versus CCNU and 5-FU plus diethylstilbestrol versus diethylstilbestrol alone in the treatment of, 243

treatment of: general discussion, 251

tumor antigen and acid phosphatase isoenzyme in, 97

virologic and immunologic studies of, 17 virology of, 33

reticulum cell, phase II study of methyl-CCNU, 1021 squamous cell, cis-dichlorodiammineplatinum(II) alone and in combination in the treatment of, 647

stomach

edvanced, adriamycin in the treatment of, 405 combinations of cyclophosphamide, vincristine, and 5-FU in the treatment of, 425

testicular

cis-dichlorodiammineplatinum(II) in the treatment of, 621

metastatic, bleomycin alone or combined with CCNU in the treatment of, 429

stage III, continuous iv bleomycin therapy combined with vinblastine in, 563

Carcinogenesis, cancer chemotherapeutic agents and, 915 Carcinoma see Cancer, type of

Cardiotoxicity see Toxic reactions: man

CCNU (NSC-79037)

combined with bleomycin in the treatment of metastatic testicular carcinoma, 429

combined with bleomycin in the treatment of MOPP-resistant Hodgkin's disease, 1147

compared to methyl-CCNU and BCNU with regard to sensitivity of colony-forming cells of hemopoietic tissue, Lewis lung carcinoma, and B16 melanoma, 929

new model for studying the effects of, in the growth of the prostate gland in rats, 185

phase II trials with, in patients with metastatic cancer of the large bowel, 333

plus BIC in patients with various disseminated solid tumors, 769

treatment of MAC-13 and MAC-15, adenocarcinomas of the colon in mice, 1083

used for the prevention of CNS involvement in Burkitt's lymphoma, 1155

used in potential test systems in animals to determine activity against prostatic carcinoma, 175

versus 5-FU in the treatment of stage D prostatic adenocarcinoma, 243

CEA (carcinoembryonic antigen), in plasma and prostatic fluid from man, dog, and baboon, 97

Cell culture studies

action of cis-dichlorodiammineplatinum(II), 665

activity of concanavalin A on KHT fibrosarcoma and AKR lymphoma cells, 319

L-[aS,5S] -a-amino-3-chloro-4,5-dihydro-5-isoxazoleacetic acid in the treatment of L1210 cells, 481

attempts to establish human prostatic tumors in culture,

disaggregation of prostates and purification of epithelial cells from normal and cancerous prostates using sedimentation in an isokinetic density gradient of Ficoll, 143

effect of dianhydrogalactitol on survival and phase sensitivity of the cell cycle of HeLa cells, 493

investigation of specific antigens in human prostatic cancer, 105

microbiologic assay for cytosine arabinoside, 515 monolayer cultures of human prostatic cells, 59

preliminary observations on temperature-enhanced drug uptake by leukemic leukocytes, 985

properties of prostatic tissue transformed by SV40, 51

6C3HED/OG lymphosarcoma see Tumor systems, mice Children's Cancer Study Group see Cooperative groups

Chlorambucil (NSC-3088), treatment of MAC-13 and MAC-15, adenocarcinomas of the colon in mice, 1083

Chloroquine (NSC-187208), combined with cyclophosphamide and prednisone in the treatment of multiple myeloma resistant to melphalan, 557

Chromomycin A<sub>3</sub> (NSC-58514), phase II study of, in advanced colorectal cancer, 577

Cis-dichlorobiscyclopentylamineplatinum(II)

antitumor activity and tissue distribution of, in animals, 629

chemistry of, 589

preliminary clinical studies with, 647

Cis-dichlorodiammineplatinum(II) (NSC-119875)

action of, at the cellular level, 665

alone or combined with various other agents in the treatment of murine leukemia L1210, 629

antitumor activity of, in various animal tumors, 589 biologic and chemical effects of, on DNA, 643

combined with cyclophosphamide in the treatment of human malignancies, 995

compared to other platinum compounds, activity against experimental animal tumors, 287

hearing loss and other toxic effects in rhesus monkeys treated with, 467

tissue analysis, toxicity, and antitumor activity of in nonleukemic patients, 647

in the treatment of lymphomas and ovarian, head and neck, and testicular cancers, 621

Citrovorum factor (NSC-3590)

absorption of, from a "mouthwash," in man, 575 assay for, in the presence of methotrexate, 935

Colchicine (NSC-757), activated specifically by PAP, as a potential cytotoxic agent, 233

Colon cancer see Cancer, colon; Cancer, large bowel

Colorectal cancer see Cancer, colorectal (also other individual sites)

Combination chemotherapy (see also individual agents) ineffective single agents used in, 259

synergistic interaction of anticancer agents: a cellular perspective, 895

using agents with limited effectiveness, 457

Commentaries

Antiviral Chemotherapy as an Indicated Adjunct to Cancer Chemotherapy, 261

Cancer Chemotherapeutic Agents and Carcinogenesis, 915

Current Status of Clinical Immunotherapy, 901

Laminar Air Flow Room Reverse Isolation and Microbial Suppression to Prevent Infection in Patients With Cancer, 1055

The Role of Structure-Activity Studies in the Design of Antitumor Agents, 679

Synergistic Interaction of Anticancer Agents: A Cellular Perspective, 895

Concanavalin A (NSC-143504), action on experimental tumor cells and possible use in cancer chemotherapy, 319 Cooperative groups

Acute Leukemia Group B, multiple myeloma resistant to melphalan treated with cyclophosphamide and prednisone with or without chloroquine, 557

Children's Cancer Study Group

adriamycin combined with DTIC in the treatment of advanced, childhood, stage IV neuroblastoma, 1015

dibromodulcitol compared with cyclophosphamide as remission maintenance therapy in previously treated children with acute lymphocytic or acute undifferentiated leukemia: possible effectiveness in reducing the incidence of central nervous system leukemia, 989

standard-dose cyclophosphamide vs high-dose cyclophosphamide vs cyclophosphamide with cytosine arabinoside in the maintenance treatment of childhood acute lymphocytic leukemia, 1097

Eastern Oncology Group, phase II trials with streptozotocin, procarbazine, 6-thioguanine, or CCNU in patients with metastatic cancer of the large bowel, 333

European Organization for Research on Treatment of Cancer (EORTC) Genito-Urinary Tract Cancer Group B, clinical trial of 2-bromo-a-ergocryptine in the treatment of human prostatic cancer, 209

Southwest Oncology Group

BIC in the treatment of childhood malignancy, 371

clinical trials with 1-acetyl-2-picolinoylhydrazine in children with various malignant neoplasms, 341

methotrexate alone or combined with daunorubicin in the remission-maintenance treatment of acute lymphocytic leukemia, 395

phase I clinical study of guanazole in the treatment of various tumors, 1117

phase I study of adriamycin combined with 5-FU in the treatment of breast cancer and other solid tumors, 1163

various combinations of cyclophosphamide, vincristine, and 5-FU in the treatment of adenocarcinoma, 495

Veteran's Administration Urological Research Group, studies of prostatic cancer, 225

Western Cancer Study Group

determination of 5-FU plasma levels in rats and man by isotope dilution-mass fragmentography, 279

5-FU in the treatment of pancreatic cancer: comparison of oral and iv routes, 1031

COP (cyclophosphamide, vincristine [Oncovin], and prednisone) see Individual drugs

Corynebacterium parvum, phase I study in patients with various solid tumors, 1139

Cyclocytidine (NSC-145668)

distribution of, compared with cytosine arabinoside in mice, 501

evaluation of sialogogic action of, 1019

phase I evaluation of, in the treatment of acute leukemia and solid tumors, 389

Cyclophosphamide (NSC-26271)

combined with BCNU in the remission maintenance of adult acute nonlymphocytic leukemia, 537

combined with cis-dichlorodiammineplatinum(II) in the treatment of human malignancies, 995

combined with cytosine arabinoside and methotrexate in

the treatment of advanced breast and lung cancer, 1091 combined with 5-FU with or without vincristine in the treatment of various adenocarcinomas, 425

combined with methyl-CCNU in a comparative study with DTIC plus vincristine in patients with disseminated malignant melanoma, 451

combined with methyl-CCNU in the treatment of advanced gastrointestinal cancer, 1161

combined with methyl-CCNU and vincristine in the treatment of small cell cancer of the lung in a 3-week schedule, 1127

combined with prednisone with or without chloroquine in the treatment of multiple myeloma resistant to melphalan, 557

combined with vincristine and actinomycin D with or without radiation therapy in the treatment of childhood rhabdomyosarcoma, 359

compared with dibromodulcitol as remission maintenance therapy in previously treated children with acute lymphocytic or acute undifferentiated leukemia: possible effectiveness in reducing the incidence of central nervous system leukemia, 989

compared with 5-FU in patients with advanced prostatic cancer, 195

compared to 5-FU in the treatment of bronchogenic cancer, 1025

evaluation in the C1300 murine neuroblastoma model,

given alone or combined with vincristine and prednisone in the treatment (COP) of diffuse non-Hodgkin's lymphoma, 421

high-dose, in the treatment of recurrent or progressive ovarian adenocarcinoma, 1157

inhibition of antilymphoma allograft response in normal and lethally irradiated mice by, 967

immediate cerebral symptoms during rapid iv administration of, 441

new model for studying the effects of, on the growth of the prostate gland in rats, 185

plus 5-FU, compared with adriamycin in the treatment of advanced prostatic cancer, 203

standard dose vs high dose vs cyclophosphamide plus cytosine arabinoside in the maintenance treatment of childhood acute lymphocytic leukemia, 1097

treatment of MAC-13 and MAC-15, adenocarcinomas of the colon in mice, 1083

in the treatment of nonlymphoid solid tumors, 411

used in potential test systems in animals to determine activity against prostatic cancer, 175

Cyproterone acetate (NSC-81430), new model for studying the effects of, in the growth of the prostate gland in rats,

Cytembena (NSC-104801)

nephrotoxic effects of, in dogs and monkeys, 1071 phase II study of, in advanced colorectal cancer, 581

Cytosine arabinoside (NSC-63878)

analysis of the effects of, on cell cycle kinetics, 847 combined with cyclophosphamide and compared to highdose cyclophosphamide or standard-dose cyclophosphamide in the maintenance treatment of childhood acute lymphocytic leukemia, 1097

the treatment of advanced breast and lung cancer, 1091 combined with daunorubicin, 6-thioguanine, prednisone, and vincristine in the treatment of adults with acute nonlymphocytic leukemia, 1131

combined with daunorubicin, vincristine, and prednisone in the treatment of advanced adult acute leukemia, 757 disposition of, and its metabolites: a pharmacokinetic

simulation, 861

distribution of, compared with cyclocytidine in mice, 501 inhibition of deamination of, by rhodium(II) acetate, 661 inhibition of deamination of, by tetrahydrouridine, 717 microbiologic assay for, using a mutant of Streptococcus

faecium var. durans resistant to methotrexate and 6-

MP, 515

Daunomycin, N-(butylcarbamoyl)- (NSC-143496), toxicologic screening in rats, 707

(NSC-143114), Daunomycin-semicarbazone toxicologic screening in rats, 707

Daunorubicin (NSC-82151)

antitumor activity and cardiotoxicity of, another hypothesis, 258

combined with cytosine arabinoside, 6-thioguanine, prednisone, and vincristine in the treatment of adults with acute nonlymphocytic leukemia, 1131

combined with methotrexate in the remissionmaintenance treatment of acute lymphocytic leukemia,

combined with vincristine, cytosine arabinoside, and prednisone in the treatment of advanced adult acute leukemia, 757

contact dermatitis associated with, 677

DNA complexes of, 260

enhancement of the effectiveness of, combined with adriamycin against early mouse L1210 leukemia with ICRF-159, 689

toxicologic screening in rats, 707

Daunorubicin-DNA (NSC-169533), comparison of different formulations of, 260

**DES** see Diethylstilbestrol

Dianhydrogalactitol (NSC-132313), survival and phase sensitivity of HeLa cells treated with, 493

Dibromodulcitol (NSC-104800), compared with cyclophosphamide as remission maintenance therapy in previously treated children with acute lymphocytic or acute undifferentiated leukemia: possible effectiveness in reducing the incidence of central nervous system leukemia, 989

Diethylstilbestrol (NSC-3070)

plus 5-FU or alone in the treatment of stage D prostate adenocarcinoma, 243

in the treatment of prostatic carcinoma, 225

Diglycolaldehyde see Inosine dialdehyde

DNA, biologic and chemical effects of cis-dichlorodiammineplatinum(II) on, 643

DTIC (NSC-45388)

combined with adriamycin in the treatment of advanced, childhood, stage IV neuroblastoma, 1015

combined with vincristine in a comparative study with

cyclophosphamide plus methyl-CCNU in patients with disseminated malignant melanoma, 451

evaluation in the C1300 murine neuroblastoma model,

new model for studying the effects of, in the growth of the prostate gland in rats, 185

stochastic compartmental modeling of the disposition of, 843

in the treatment of solid tumors in children, 351

used in potential test systems in animals to determine activity against prostatic carcinoma, 175

E

Eastern Cooperative Oncology Group see Cooperative

Ehrlich carcinoma see Tumor systems, mice

Emetine (NSC-33669), phase I-II studies in the treatment of epidermoid bronchogenic cancer, 1171

EORTC see Cooperative groups

Epipodophyllotoxins see VM-26 and VP-16-213

Epithelial carcinoma see Cancer, epithelial

Estradiol (NSC-9895), new model for studying the effects of, in the growth of the prostate gland in rats, 185

Estramustine phosphate (NSC-89199)

clinical results with, in far-advanced prostatic carcinoma: comparison of iv and oral preparations, 229

new model for studying the effects of, in the growth of the prostate gland in rats, 185

oral, in the treatment of advanced (stage D) prostatic carcinoma, 219

European Organization for Research on Treatment of Cancer (EORTC) Genito-Urinary Tract Cancer Cooperative Group B see Cooperative groups

5-Fluorouracil (NSC-19893, 5-FU)

applied in a mouthwash in the treatment of residual or relapsing cancer of the lip or buccal mucosa, 1052

cardiotoxicity of, in man, 1051

combined with cyclophosphamide and/or vincristine in the treatment of various adenocarcinomas, 425

combined with methotrexate and prednisolone in the treatment of hepatoma, 1167

compared to adriamycin in the treatment of advanced colorectal cancer, 405 compared with adriamycin in the treatment of advanced

prostatic cancer, 215

compared with cyclophosphamide in patients with advanced prostatic cancer, 195

compared to cyclophosphamide in the treatment of bronchogenic cancer, 1025

compared to mitomycin C using hepatic arterial infusion for liver metastases from colon cancer, 401

comparison of oral and iv routes in the treatment of pancreatic cancer, 1031

5-day iv infusion after failure on weekly therapy in gastroenteric cancer, 1177

determination of plasma levels in rats and man by isotope dilution-mass fragmentography, 279

evaluation in the C1300 murine neuroblastoma model, 975

new model for studying the effects of, on the growth of the prostate gland in rats, 185

phase I study, combined with adriamycin in the treatment of breast cancer and other solid tumors, 1163

plus cyclophosphamide, compared with adriamycin in the treatment of advanced prostatic cancer, 203

plus diethylstilbestrol vs diethylstilbestrol alone in the treatment of stage D prostatic adenocarcinoma, 243 for prostatic cancer in man, 251

treatment of MAC-13 and MAC-15, adenocarcinomas of the colon in mice, 1083

used in potential test systems in animals to determine activity against prostatic cancer, 175

versus CCNU in the treatment of stage D prostatic adenocarcinoma, 243

# G

Gallium nitrate (NSC-15200), toxicity and antitumor activity in experimental rodent tumors, 599

Gastrointestinal cancer see Cancer, gastrointestinal (also other individual sites)

Genitourinary cancer see Cancer, genitourinary (also other individual sites)

Glioma 26 see Tumor systems, mice

β-Glucosidase (NSC-128056)

antitumor activity of amygdalin MF as a single agent and combined with, on a spectrum of transplantable rodent tumors, 939

combined with amygdalin MF, experimental studies of the antitumor activity of, 951

Gompertz growth curves, estimation of tumor cell kill from, 267

Guanazole (NSC-1895)

evaluation in the C1300 murine neuroblastoma model, 975

phase I study of, in the treatment of various tumors, 1117 Guest editorial, Combination Chemotherapy for Breast Cancer, 893

# H

Head and neck cancer see Cancer, head and neck

HeLa cells see Cell culture studies

Hepatic arterial infusion, for liver metastases from colon cancer: comparison of 5-FU and mitomycin C, 401

Hepatoma, combination of 5-FU, methotrexate, and prednisolone in the treatment of, 1167

Hexamethylmelamine (NSC-13875), used in potential test systems in animals to determine activity against prostatic cancer, 175

Llyxo-Hexopyranoside, 3-β-acetyl-1,2,3,4,6.11-hexahydro-3,5,12-trihydroxy-10-methoxy-6,11-dioxo-1α-naphthacenyl-3-acetamido-2,3,6-trideoxy-,α-, compd. with isopropyl alcohol (1:1) (NSC-118714), toxicologic screening in rats, 707 Hodgkin's disease, MOPP-resistant, bleomycin combined with CCNU in the treatment of, 1147

Hydrazine sulfate (NSC-150014), in the treatment of various cancers, 1151

6-Hydroxydopamine (NSC-233898), unorthodox therapy for murine neuroblastoma with, 571

Hydroxyurea (NSC-32065)

combined with vincristine in the treatment of metastatic renal cancer, 1159

new model for studying the effects of, in the growth of the prostate gland in rats, 185

Hyperalimentation, iv, chemotherapeutic response in patients given, 437

### Hyperthermia

as an adjuvant in the treatment of osteogenic sarcoma, 257

preliminary observations on temperature-enhanced drug uptake by leukemic leukocytes in vitro, 985

# ICRF-159 (NSC-129943)

evaluation in the C1300 murine neuroblastoma model, 975

phase II study of, in advanced colorectal cancer, 761 used to enhance the effectiveness of daunorubicin or adriamycin against early mouse L1210 leukemia, 689

Imidazole carboxamides (see also DTIC and BIC), relationship of lipophilicity to activity against intracerebral murine Glioma 26, 327

Immunotherapy (see also Bacillus Calmette-Guerin) current status of, 901

inhibition of antilymphoma allograft response in normal and lethally irradiated mice by cyclophosphamide and isophosphamide. 967

prostatic cancer treated with bacillus Calmette-Guerin, 157

Indium nitrate, toxicity and antitumor activity in experimental rodent tumors, 599

Inosine dialdehyde (NSC-118994)

chemical assay to determine concentrations of, in biologic fluids, 685

phase I study of, 1007

used in potential test systems in animals to determine activity against prostatic cancer, 176

Isophosphamide (NSC-109724)

evaluation in the C1300 murine neuroblastoma model, 975

human pharmacokinetic model for, 877

inhibition of antilymphoma allograft response in normal and lethally irradiated mice by, 967

phase I study of, 751

used in potential test systems in animals to determine activity against prostatic cancer, 175

# K

KHT fibrosarcoma see Tumor systems, mice Kidney cancer see Cancer, kidney Laetrile see Amygdalin MF

LAF-17 lymphoma see Tumor systems, mice

Laminar air flow rooms, use of, and microbial suppression to prevent infection in patients with cancer, 1055

Lankacidin C (NSC-145118), antitumor and immunosuppressive activity against experimental tumors in mice, 919

Lankacidin-group antibiotics, antitumor and immunosuppressive activities of, structure-activity relationships, 919

Large bowel cancer see Cancer, large bowel Letters

Another Hypothesis Concerning the Antitumor Activity and Cardiotoxicity of Daunorubicin (NSC-82151) and Adriamycin (NSC-123127), 258

Antitumor Activity of Calusterone (NSC-88536) in Advanced Breast Cancer, 890

Cardiotoxicity of 5-FU (NSC-19893), 1051

Combination Chemotherapy Using Agents With Limited Effectiveness, 457

Contact Dermatitis Associated With Adriamycin (NSC-123127) and Daunorubicin (NSC-82151), 677

DNA Complexes of Daunorubicin (NSC-82151) and Adriamycin (NSC-123127), 260

Further Discussion of Ineffective Single Agents in Combination Chemotherapy, 259

Hyperthermia as an Adjuvant in the Treatment of Osteogenic Sarcoma, 257

Intraoral Topical Application of 5-FU (NSC-19893) as a "Mouthwash" in the Treatment of Residual or Relapsing Cancer of the Lip or Buccal Mucosa, 1052

Metastatic Renal Adenocarcinoma Produced by Streptozotocin (NSC-85998), 891

Myocardial Infarction in a 27-Year-Old Woman: Possible Complication of Treatment With VP-16-213 (NSC-141540), Mediastinal Irradiation, or Both, 887

Should the Diverse Biologic Activity of Effective Antitumor Agents be Considered a Hindrance to Their Clinical Use?, 888

Leucovorin see Citrovorum factor

# Leukemia

acute

in adults, advanced, daunorubicin, vincristine, cytosine arabinoside, and prednisone combination therapy for, 757

lymphocytic

childhood, BIC in the treatment of, 371

childhood, methotrexate alone or combined with daunorubicin in the remission-maintenance treatment of, 395

childhood, preliminary observations of VM-26 and VP-16-213 in, 743

childhood, previously treated, dibromodulcitol compared with cyclophosphamide in the maintenance treatment of: possible effectiveness in reducing the incidence of central nervous system leukemia, 989

childhood, standard-dose cyclophosphamide vs high-dose cyclophosphamide vs cyclophosphamide combined with cytosine arabinoside in the maintenance treatment of, 1097

phase I evaluation of cyclocytidine in the treatment of, 389

streptozotocin in the treatment of, 443

monocytic, childhood, vinblastine with or without prednisone in the treatment of, 385

myelogenous, phase I evaluation of cyclocytidine in the treatment of, 389

nonlymphocytic

in adults, 5-azacytidine combined with methyl-GAG in the treatment of, 1043

in adults, BCNU combined with cyclophosphamide in the remission maintenance of, 537

in adults, daunorubicin combined with cytosine arabinoside, 6-thioguanine, prednisone, and vincristine in the treatment of, 1131

childhood, preliminary observations of VM-26 and VP-16-213 in, 743

undifferentiated, childhood, previously treated, dibromodulcitol compared with cyclophosphamide in the maintenance treatment of: possible effectiveness in reducing the incidence of central nervous system leukemia, 989

central nervous system, dibromodulcitol compared with cyclophosphamide as remission maintenance therapy in previously treated children with acute lymphocytic or acute undifferentiated leukemia: possible effectiveness in reducing the incidence of, 989

chronic lymphocytic, phase I-II studies of mitoclomine in the treatment of, 1173

Levamisole (NSC-177023)

effects of, alone or combined with BCNU, on DNA synthesis by lymphocytes from immunosuppressed C57BL mice, 531

effects of, in experimental tumor systems, 697

Lewis lung carcinoma see Tumor systems, mice

Lip cancer see Cancer, lip

Liver cancer see Cancer, liver

Liver metastasis, from colon cancer, comparison of mitomycin C and 5-FU using hepatic arterial infusion, 401

L1210 leukemia see Tumor systems, mice L5MF lymphoma see Tumor systems, mice

Lung cancer see Cancer, lung

Lymphoma

Burkitt's, CCNU used for the prevention of central nervous system involvement in, 1155

Burkitt's, potential biologic markers in, 721

cis-dichlorodiammine platinum (II) in the treatment of, 621

histiocytic and poorly differentiated, streptozotocin in the treatment of, 443

prognosis of diffuse non-Hodgkin's, treated with COP or cyclophosphamide alone, 421

M

MAC-13 adenocarcinoma see Tumor systems, mice MAC-15 adenocarcinoma see Tumor systems, mice

Madison 109 lung tumor see Tumor systems, mice

Mass fragmentography, isotope dilution, determination of 5-FU plasma levels in rats and man by, 279

MCAM-7 fibrosarcoma see Tumor systems, mice

MCDV-12 leukemia see Tumor systems, mice

disseminated malignant, comparative study of methyl-CCNU with cyclophosphamide and DTIC with vincristine in patients with, 451

malignant, treatment of, with vinblastine, procarbazine, and actinomycin D, 767

metastatic, adriamycin in the treatment of, 1181 phase I study of guanazole in, 1117

# Melphalan (NSC-8806)

multiple myeloma resistant to, treated with cyclophosphamide and prednisone, with or without chloroquine,

treatment of MAC-13 and MAC-15, adenocarcinomas of the colon in mice, 1083

6-Mercaptopurine (NSC-755, 6-MP), development of a microbiologic assay capable of detecting cytosine arabinoside in body fluids in the presence of, 515

Methanesulfonates see 1-Propanol, 3,3'-iminodi-, dimethanesulfonate (ester), p-toluenesulfonate

# Methotrexate (NSC-740)

alone and in combination with daunorubicin in the remission-maintenance treatment of acute lymphocytic leu-

analysis of the effects of, on cell cycle kinetics, 847

assay for citrovorum factor in the presence of, 935

combined with bleomycin and vincristine plus radiation therapy in the treatment of non-oat-cell bronchogenic cancer, 377

combined with cytosine arabinoside and cyclophosphamide in the treatment of advanced breast and lung cancer, 1091

combined with 5-FU and prednisolone in the treatment of benatoma, 1167

development of a microbiologic assay capable of detecting cytosine arabinoside in body fluids in the presence

kinetic model for the disposition and metabolism of moderate and high-dose, in man, 811

treatment of MAC-13 and MAC-15, adenocarcinomas of the colon in mice, 1083

# Methyl-CCNU (NSC-95441)

alone or combined with cyclophosphamide in the treatment of advanced gastrointestinal cancer, 1161

combined with cyclophosphamide in a comparative study with DTIC plus vincristine in patients with disseminated malignant melanoma, 451

combined with cyclophosphamide and vincristine in the treatment of small cell carcinoma of the lung in a 3-week schedule, 1127

compared to BCNU and CCNU with regard to sensitivity of colony-forming cells of hemopoietic tissue, Lewis lung carcinoma, and B16 melanoma, 929

phase II study, in the treatment of various carcinomas, sarcomas, and lymphomas, 1021

treatment of MAC-13 and MAC-15, adenocarcinomas of the colon in mice, 1083

3-Methylcholanthrene (NSC-21970), neoplastic effect of, on human prostate in organ culture, 67

Methyl-GAG (NSC-32946), combined with 5-azacytidine in previously treated adults with acute nonlymphocytic leukemia, 1043

1-Methyl-1-nitrosourea (NSC-23909), a discussion of the apprehensions concerning experimental and clinical use

Mitoclomine (NSC-114575), phase I-II trials in chronic lymphocytic leukemia, 1173

# Mitomycin C (NSC-26980)

compared to 5-FU using hepatic arterial infusion for liver metastases from colon cancer, 401

treatment of MAC-13 and MAC-15, adenocarcinomas of the colon in mice, 1083

Moloney sarcoma virus-induced rhabdomyosarcoma see Tumor systems, mice

# Myeloma, multiple

alkylator-resistant, adriamycin in the treatment of, 345 resistant to melphalan, treated with cyclophosphamide and prednisone with or without chloroquine, 557

Nakahara-Fukuoka sarcoma see Tumor systems, mice Neuroblastoma (see also Tumor systems, mice)

in children, advanced stage IV, adriamycin combined with DTIC in the treatment of, 1015

in children, BIC in the treatment of, 371

in children. DTIC in the treatment of, 351

Nitrosoureas see Individual drugs

NSC-740 see Methotrexate NSC-752 see 6-Thioguanine

NSC-755 see 6-Mercaptopurine

NSC-757 see Colchicine

NSC-1895 see Guanazole

NSC-3053 see Actinomycin D

NSC-3070 see Diethylstilbestrol NSC-3088 see Chlorambucil

NSC-3590 see Citrovorum factor

NSC-8415 see Butyric acid NSC-8806 see Melphalan

NSC-9895 see Estradiol

NSC-9900 see Prednisolone NSC-10023 see Prednisone

NSC-13875 see Hexamethylmelamine

NSC-15197 see Thallium chloride

NSC-15200 see Gallium nitrate

NSC-15780 see Amygdalin MF

NSC-19893 see 5-Fluorouracil

NSC-21970 see 3-Methylcholanthrene

NSC-23909 see 1-Methyl-1-nitrosourea NSC-24818 see Podophyllotoxin

NSC-25485 see Strophanthin G

NSC-26271 see Cyclophosphamide

NSC-26980 see Mitomycin C

NSC-32065 see Hydroxyurea

NSC-32946 see Methyl-GAG

NSC-33669 see Emetine NSC-35443 see Papaverine

NSC-49842 see Vinblastine

NSC-58514 see Chromomycin A<sub>3</sub>

NSC-62164 see Bretylium tosylate

NSC-63878 see Cytosine arabinoside

NSC-67574 see Vincristine

NSC-68075 see Thalicarpine

NSC-68626 see 1-Acetyl-2-picolinoylhydrazine

NSC-77213 see Procarbazine

NSC-79037 see CCNU

NSC-81430 see Cyproterone acetate

NSC-82151 see Daunorubicin

NSC-82196 see BIC

NSC-85998 see Streptozotocin

NSC-88536 see Calusterone

NSC-89199 see Estramustine phosphate

NSC-95441 see Methyl-CCNU

NSC-102063 see Tetramisole

NSC-102816 see 5-Azacytidine

NSC-104800 see Dibromodulcitol

NSC-104801 see Cytembena

NSC-109724 see Isophosphamide

NSC-112907 see Tetrahydrouridine

NSC-114575 see Mitoclomine

NSC-118714 see L-lyxo-Hexopyranoside, 3-β-acetyl-1,2,3,4,-6,11-hexahydro-3,5,12-trihydroxy-10-methoxy-6,11-dioxo-1α-naphthacenyl-3-acetamido-2,3,6-trideoxy-,α-, compd.

with isopropyl alcohol (1:1) NSC-118994 see Inosine dialdehyde

NSC-119875 see Cis-dichlorodiammineplatinum(II)

NSC-122819 see VM-26

NSC-123127 see Adriamycin

NSC-125066 see Bleomycin

NSC-128056 see  $\beta$ -Glucosidase

NSC-129943 see ICRF-159

NSC-132313 see Dianhydrogalactitol

NSC-139105 see Triazinate

NSC-140117 see 1-Propanol, 3,3'-iminodi-, dimethanesulfonate (ester), p-toluenesulfonate

NSC-141540 see VP-16-213

NSC-143017 see Aluminum nitrate

NSC-143114 see Daunomycin-semicarbazone

NSC-143496 see Daunomycin, N-(butylcarbamoyl)-

NSC-143504 see Concanavalin A

NSC-145118 see Lankacidin C

NSC-145668 see Cyclocytidine

NSC-149584 see Adriamycin, 14-octanoate, hydrochloride

NSC-150014 see Hydrazine sulfate

NSC-163501 see L-[aS,5S]-a-amino-3-chloro-4, 5-dihydro-5-isoxazoleacetic acid

NSC-164011 see Rubidazone

NSC-166641 see Anhydro-ara-5-fluorocytidine

NSC-169533 see Daunorubicin-DNA

NSC-169534 see Adriamycin-DNA

NSC-169774 see 2-Bromo-a-ergocryptine

NSC-177023 see Levamisole

NSC-187208 see Chloroquine

NSC-233898 see 6-Hydroxydopamine

NSC-403169 see Acronycine

NSC-409962 see BCNU

Nucleosides, as potential biologic markers in Burkitt's lymphoma, 721

0

Ototoxicity see Toxic reactions: animals Ovarian cancer see Cancer, ovarian

P

Pancreatic cancer see Cancer, pancreas

PAP (prostatic acid phosphatase)

activity of cultured cells, 59, 147

design of spindle poisons activated specifically by, and new methods for cytochemistry, 233

Papaverine (NSC-35443), unorthodox therapy for murine neuroblastoma with, 571

**Pharmacokinetics** 

analysis of the effects of antitumor drugs on cell cycle kinetics, 847

considerations of resistance to anticancer drugs, 795

cytokinetic aspects of clinical drug resistance, 805

disposition of cytosine arabinoside and its metabolites: a pharmacokinetic simulation, 861

human model for isophosphamide, 877

kinetic model for the disposition and metabolism of moderate and high-dose methotrexate in man, 811

mathematical models for cancer chemotherapy: pharmacokinetic and cell kinetic considerations, 827

preliminary model for adriamycin, 819

some fundamental considerations of the applications of, to cancer chemotherapy, 777

stochastic compartmental modeling of the disposition of DTIC, 843

Phase I studies

of adriamycin plus 5-FU in the treatment of breast cancer and other solid tumors, 1163

of 5-azacytidine using a 24-hour continuous infusion for 5 days in the treatment of various cancers, 1123

of Corynebacterium parvum in the treatment of various solid tumors, 1139

of cyclocytidine for solid tumors and acute leukemias,

of emetine in the treatment of epidermoid bronchogenic cancer, 1171

of guanazole in various tumors, 1117

of inosine dialdehyde, 1007

of isophosphamide, 751

of mitoclomine in chronic lymphocytic leukemia, 1173

of thalicarpine, a plant alkaloid, 1001

Phase II studies

1-acetyl-2-picolinoylhydrazine in children with various malignant neoplasms, 341

of adriamycin in patients with metastatic melanoma, 1181

of BIC in primary and secondary brain tumors, 327

of BIC in the treatment of childhood malignancy, 371

of chromomycin  $A_3$  in advanced colorectal carcinoma, 577

of cis-dichlorodiammineplatinum(II) and cyclophosphamide in the treatment of human malignancies, 995

of cytembena in advanced colorectal carcinoma, 581

of emetine in the treatment of epidermoid bronchogenic cancer, 1171

of ICRF-159 in advanced colorectal carcinoma, 761

of methyl-CCNU in the treatment of various solid carcinomas, sarcomas, and lymphomas, 1021

of mitoclomine in chronic lymphocytic leukemia, 1173 of procarbazine, streptozotocin, 6-thioguanine, or CCNU in patients with metastatic cancer of the large bowel,

Pimelea simplex, antitumor activity of, 585

Platinum "blues"

antitumor activity of, in Sarcoma 180, 589

platinum-pyrimidine blues, and related complexes, methods of synthesis, suggested classification scheme, and initial activity in animal tumors, 287

platinum uracil blue, preliminary clinical studies with, 647

platinum uracil blue, tissue distribution, antitumor activity in animals, and synthesis of, 629

Platinum compounds (see also cis-dichlorodiammineplatinum [II] and other specific compounds)

chemistry and biologic activity of, 589

clinical studies of, in various malignant diseases, 647 coordination complexes of, as antitumor agents, 629

P388 leukemia see Tumor systems, mice

Podophyllotoxin (NSC-24818), attempts to demonstrate cytotoxic activity by specific activation by PAP, 233

### **Polyamines**

potential biologic markers in Burkitt's lymphomas, 721 urinary excretion of, in patients with advanced malignancy, 1103

Prednisolone (NSC-9900), combined with 5-FU and methotrexate in the treatment of hepatoma, 1167

Prednisone (NSC-10023)

combined with cyclophosphamide and vincristine in the treatment of diffuse non-Hodgkin's lymphoma, 421

combined with cyclophosphamide with or without chloroquine in the treatment of multiple myeloma resistant to melphalan, 557

combined with daunorubicin, cytosine arabinoside, and vincristine in the treatment of advanced adult acute leukemia, 757

combined with daunorubicin, 6-thioguanine, cytosine ar&binoside, and vincristine in the treatment of adults with acute nonlymphocytic leukemia, 1131

combined with vinblastine in the treatment of acute monocytic leukemia in children, 385

Procarbazine (NSC-77213)

combined with actinomycin D and vinblastine in the treatment of malignant melanoma, 767

phase II trials with, in patients with metastatic cancer of the large bowel, 333

used in potential test systems in animals to determine activity against prostatic carcinoma, 175

1-Propanol, 3,3'-iminodi-, dimethanesulfonate (ester), p-toluenesulfonate (NSC-140117), a new methanesulfonic acid ester of aminoglycol, in the management of lung cancer. 367

Prostatic acid phosphatase see PAP

Prostatic cancer see Cancer, prostate (see also pp 1-255, National Prostatic Cancer Project Workshop)

Pyrimidine catabolic end-products, as potential biologic markers in Burkitt's lymphoma, 721 R

Radiation therapy

combined with bleomycin, vincristine, and methotrexate in the treatment of non-oat-cell bronchogenic carcinoma, 377

combined with vincristine, cyclophosphamide, and actinomycin D in the treatment of childhood rhabdomyosarcoma, 359

extended-field, in prostatic carcinoma, 165

myocardial infarction as a possible complication of treatment with VP-16-213, mediastinal irradiation, or both 887

for prostatic cancer in man, 251

Rauscher leukemia see Tumor systems, mice, MCDV-12 leukemia

Rhabdomyosarcoma

in children, 1-acetyl-2-picolinoylhydrazine in the treatment of, 341

in children, DTIC in the treatment of, 351

in children, vincristine, actinomycin D, and cyclophosphamide with or without radiation therapy in the treatment of 359

Rhodium(II) acetate

inhibition of deamination of cytosine arabinoside by, 661 interaction of, with molecules of biologic importance, 611

Rhodium(II) butyrate, interaction of, with molecules of biologic importance, 611

Rhodium(II) propionate, interaction of, with molecules of biologic importance, 611

Ridgway osteogenic sarcoma see Tumor systems, mice Rubidazone (NSC-164011)

development of resistance to, in Ehrlich ascites tumor in vivo, 301

toxicologic screening in rats, 707

S

Sarcoma

advanced, adriamycin alternating with vincristine plus actinomycin D in the treatment of, 1035

cis-dichlorodiammineplatinum(II) plus cyclophosphamide in the treatment of, 995

osteogenic, hyperthermia as an adjuvant in the treatment of, 257

Sarcoma 180 see Tumor systems, mice

Southwest Oncology Group see Cooperative groups

Spindle poisons, activated specifically by PAP, as potential cytotoxic agents, 233

Squamous cell cancer see Cancer, squamous cell

SR61 leukemia see Tumor systems, mice

Stomach cancer see Cancer, stomach

Streptozotocin (NSC-85998)

fate of, in the treatment of patients with advanced cancer, 547

metastatic renal adenocarcinoma produced by, 891 new model for studying the effect of, in the growth of the

prostate gland in rats, 185
phase II trials with, in patients with metastatic cancer of
the large bowel, 333

in the treatment of lymphoreticular malignancies, 443

Vol. 59, No. 6, Nov/Dec 1975

used in potential test systems in animals to determine activity against prostatic carcinoma, 175

Strophanthin G (NSC-25485), lack of effect on cardiac uptake of adriamycin, 765

Structure-activity studies

antitumor and immunosuppressive activities of lankacidin-group antibiotics, 919

the role of, in the design of antitumor agents, 679

SV40-transformed prostatic tissue see Tumor systems,

Symposia, proceedings of

National Prostatic Cancer Workshop, 1

Pharmacokinetic Modeling of Anticancer Drugs, 775

Role of Metal Complexes and Metal Salts in Cancer Chemotherapy, 589

# T

Testicular cancer see Cancer, testicular

Tetrahydrouridine (NSC-112907)

inhibition of deamination of cytosine arabinoside by, 717 used to enhance the oral activity of 5-azacytidine in L1210 leukemic mice, 459

Tetramisole (NSC-102063), effects of, in experimental tumor systems, 697

Thalicarpine (NSC-68075), phase I study of, 1001

Thallium chloride (NSC-15197), toxicity and antitumor activity in experimental rodent tumors, 599

6-Thioguanine (NSC-752)

combined with daunorubicin, cytosine arabinoside, prednisone, and vincristine, in the treatment of adults with acute nonlymphocytic leukemia, 1131

development of a microbiologic assay capable of detecting cytosine arabinoside in body fluids in the presence of 515

phase II trials with, in patients with metastatic cancer of the large bowel, 333

Toxic reactions: observations in animals

cardiotoxicity of anthracycline antibiotics in rats, 707 evaluation of sialogogic action of cyclocytidme and anhydro-ara-5-fluorocytidine, 1019

hearing loss in rhesus monkeys treated with cis-dichlorodiammineplatinum(II), 467

inability of strophanthin G to affect cardiac uptake of adriamycin, 765

nephrotoxic effects of cytembena in dogs and monkeys,

Toxic reactions: observations in man

cardiotoxicity

of daunorubicin and adriamycin, another hypothesis of, 258

of 5-FU in man, 1051

contact dermatitis associated with adriamycin and daunorubicin, 677

immediate cerebral symptoms during rapid is administration of cyclophosphamide, 441

myocardial infarction as a possible a reaction of treatment with VP-16-213, mediastinal readiation, or both, 887

reversible penile calcifications associated with bleomycin-induced pulmonary toxicity, 1039 Triazinate (NSC-139105), an antifolate drug, preclinical studies with, in beagle dogs and rhesus monkeys, 523

Tumor cell kill, estimation of, from Gompertz growth curves, 267

Tumor systems in animals

hamsters, SV40-transformed prostatic tumors in, establishment of tissue cultures from, 51

mice

ADJ/PC6A tumor, antitumor activity of platinumpyrimidine blues and related complexes against, 287

AKR lymphoma, activity of concanavalin A on, 319 B16 melanoma

antitumor activity of amygdalin MF as a single agent and combined with  $\beta$ -glucosidase, 939

differential sensitivity of colony-forming cells of, to BCNU, CCNU, and methyl-CCNU, 929

effects of levamisole and tetramisole in, 697

brain tumors, review of selected experimental models used in chemotherapy experiments, 729

6C3HED/OG lymphosarcoma, antitumor and immunosuppressive activities of lankacidin-group antibiotics on, 919

Ehrlich carcinoma

antitumor activity of platinum-pyrimidine blues and related complexes against, 287

antitumor activity of selected amino acid derivatives against, 309

development of resistance to rubidazone in, 301 interaction of rhodium(II) carboxylates with molecules of biologic importance, 611

Glioma 26, relationship of lipophilicity of imidazole carboxamides to activity against, 327

human prostatic tumors in, 47

KHT fibrosarcoma, activity of concanavalin A on, 319 LAF-17 (radiation induced) lymphoma, inhibition of antilymphoma allograft response in, by cyclophosphamide and isophosphamide, 967

Lewis lung carcinoma

antitumor activity of amygdalin MF alone and combined with β-glucosidase, 951

differential sensitivity of colony-forming cells of, to BCNU, CCNU, and methyl-CCNU, 929

effects of levamisole and tetramisole in, 697

L1210 leukemia

antitumor activity of amygdalin MF as a single agent and combined with β-glucosidase, 939

antitumor activity of platinum-pyrimidine blues and related complexes against, 287

antitumor activity of selected amino acid derivatives against, 309

antitumor and immunosuppressive activities of lankacidin-group antibiotics against, 919

cis-dichlorodiammineplatinum(II) alone or combined with various other agents in the treatment of, 629

effects of levamisole and tetramisole in, 697

enhancement by tetrahydrouridine of the oral activity of 5-azacytidine in, 459

enhancement of the effectiveness of daunorubicin or adriamycin against, with ICRF-159, 689

preliminary observations on temperature-enhanced drug uptake by leukemic leukocytes, in vitro, 985 solid lymphocytic, comparative distribution studies with cyclocytidine and cytosine arabinoside in, 501

L5MF-22 (radiation-induced) lymphoma, inhibition of antilymphoma allograft response in, by cyclophosphamide and isophosphamide, 967

MAC-13 and MAC-15 adenocarcinoma, chemotherapy of, with various agents, 1083

Madison 109 lung tumor, effects of levamisole and tetramisole in, 697

MCAM-7 (3-methylcholanthrene-induced) fibrosarcoma, specificity of cell membrane antigens in, 127

MCDV-12 leukemia (Rauscher), antitumor activity of platinum-pyrimidine blues and related complexes against, 287

Moloney sarcoma virus-induced rhabdomyosarcoma, effects of levamisole and tetramisole in, 697

Nakahara-Fukuoka sarcoma, antitumor activity of selected amino acid derivatives against, 309

neuroblastoma

C1300, further evaluation of, with various antitumor agents, 975

unorthodox therapy for, with 6-hydroxydopamine, bretylium tosylate, papaverine, and butyric acid, 571

P388 leukemia

antitumor activity of amygdalin MF alone and combined with  $\beta$ -glucosidase, 951

antitumor activity of amygdalin MF as a single agent and combined with  $\beta$ -glucosidase, 939 antitumor activity of *Pimelea simplex* against, 585

effects of levamisole and tetramisole in, 697
Ridgway osteogenic sarcoma, antitumor activity of amygdalin MF alone and in combination with β-glucosidase, 951

Sarcoma 180

antitumor activity of platinum blue complexes against, 589

antitumor activity of platinum-pyrimidine blues and related complexes against, 287

antitumor activity of selected amino acid derivatives against, 309

SR61 leukemia, antitumor activity of selected amino acid derivatives against, 309

rats

AH13, AH60C, and AH7974 hepatomas, antitumor activity of selected amino acid derivatives against, 309 brain tumors, review of selected experimental models used in chemotherapy experiments, 729

Walker 256 carcinosarcoma

antitumor activity of amygdalin MF as a single agent and combined withβ-glucosidase, 939

antitumor activity of gallium nitrate and other group IIIa metal salts in, 599

Yoshida sarcoma, antitumor activity of selected amino acid derivatives against, 309

V

Veterans' Administration Cooperative Urological Research Group see Cooperative groups

# Vinblastine (NSC-49842)

combined with continuous iv bleomycin in stage III testicular neoplasia, 563

combined with procarbazine and actinomycin D in the treatment of malignant melanoma, 767

evaluation in the C1300 murine neuroblastoma model, 975

with or without prednisone in the treatment of acute monocytic leukemia in children, 385

Vincristine (NSC-67574)

combined with actinomycin D and alternating with adriamycin in the treatment of advanced sarcomas, 1035

combined with actinomycin D and cyclophosphamide with or without radiation therapy in the treatment of childhood rhabdomyosarcoma, 359

combined with bleomycin and methotrexate plus radiation therapy in the treatment of non-oat-cell bronchogenic carcinoma, 377

combined with cyclophosphamide and methyl-CCNU in the treatment of small cell carcinoma of the lung in a 3-week schedule, 1127

combined with cyclophosphamide and prednisone in the treatment of diffuse non-Hodgkin's lymphoma, 421

combined with daunorubicin, cytosine arabinoside, and prednisone in the treatment of advanced adult acute leukemia. 757

combined with daunorubicin, 6-thioguanine, cytosine arabinoside, and prednisone in the treatment of adults with acute nonlymphocytic leukemia, 1131

combined with DTIC in a comparative study with cyclophosphamide plus methyl-CCNU in patients with disseminated malignant melanoma, 451

combined with 5-FU with or without cyclophosphamide in the treatment of various adenocarcinomas, 425

combined with hydroxyurea in the treatment of metastatic renal cancer, 1159

evaluation in the C1300 murine neuroblastoma model,

new model for studying the effect of, on the growth of the prostate gland in rats, 185

treatment of MAC-13 and MAC-15 adenocarcinomas of the colon in mice. 1083

used in potential test systems in animals to determine activity against prostatic carcinoma, 175

Viruses, role in prostatic cancer, 17, 33, 39

VM-26 (NSC-122819), compared to VP-16-213 in childhood cancer: preliminary observations, 743

VP-16-213 (NSC-141540)

clinical antitumor and toxicity study in solid tumors, 737 compared to VM-26 in childhood cancer: preliminary observations, 743

given orally to patients with advanced neoplastic disease, 1027

myocardial infarction as a possible complication of treatment with, or mediastinal irradiation, or both, 887

W

Walker 256 carcinosarcoma see Tumor systems, rats Western Cancer Study Group see Cooperative groups

V

Yoshida sarcoma see Tumor systems, rats

# **Author Index**

Aboul-Enein M. 367 Adamson RH, 599 Adolphe AB, 547 Ahluwalia BS, 3 Ahmann DL, 451, 1103 Alberts DS. 345 Albo V, 351, 989, 1097 Allan BD, 257 Allen LM, 811, 877 Arena E, 765 Aroesty J, 861 Arva SK, 39 Attah EB, 3 Avery T, 743

Babcock MS, 59 Bachur NR, 677, 765 Bagshaw MA, 165 **Baker LH**, 1123 Ball CR, 1083 Band PR, 1139 Barkley HT, Jr, 377 Barlow JJ, 1157 Barnard EA, 97 Barzi A, 967 Bateman JR, 1031, 1177 Batz K, 429 Bear JL, 611, 661 Bellet RE, 1181 Bender RA, 795, 805 Bennett JM, 333 Bergsagel DE, 537 Berman M, 811 Bernstein I. 1015 Bertino JR, 523, 575, 1091 Bhargava A, 97 Bischoff KB, 777 Bisel HF, 451 Blackard CE, 225 Blackett NM, 929 Bleyer WA, 721, 795 Block JB, 985 Bluming AZ, 901 Boldrey E, 327 Bonadonna G, 1161 Bonar RA, 51 Bonmassar E, 967 Bonnet JD, 425 Bono VH, 481 Bowen JM, 17 Brändle E, 707

Brannen GE, 127

Brema F, 890 Brenkus LB, 847 Broder LE, 1001, 1171 Bruce WR, 319 Bruckner HW, 575 Brugarolas A, 1025 Brunner KW, 429 Buckner CD, 1131 Bull MI, 1171 Burns CP, 757

Cain BF, 679 Canellos GP, 599, 893 Cangir A, 371 Caoili EM, 1117 Carter WA, 39 Chainuvati T, 1167 Chalbaud RA, 433 Chang H-Y, 769 Chang IM, 611 Chao DL, 661 Chawla PL, 389 Cheever MA, 1131 Chirigos MA, 531 Choe B-K. 147 Chu TM, 97, 195 Chuang S-N, 827 Chung WS, 1157 Coffey DS, 127, 185 Cohen MH, 243, 751, 1001, 1171 Cohen SS, 259 Coleman D, 1131 Coleman GL, 523, 1071 Colsky J. 333 Colvin M, 411 Connolly CA, 3 Cooney DA, 481 Copeland EM III, 437 Coune A, 209 Courtenay VD, 929 Cowan DH, 537 Crafts D, 327 Creaven PJ, 751, 811, 877, 1001, 1171 Cunningham TJ, 1127 Curtis JE, 537 Cysyk RL, 685, 689

Davidson JP, 287 DeConti RC, 1091 Dedrick RL, 795, 805 de Duve C, 260

DeMarsh Q, 1131 Desmond W. 47 DeVita VT, 1039 DeWys WD, 215 DiDomenico E. 447 Dion RL, 481 Dittman W, 1131 Dmochowski L. 17 Dobrow RB, 1131 Dombernowsky P, 1027 Donavan MA, 1127 Double JA, 1083 Douglass HO, Jr, 1035 Drewinko B, 621, 665 Dudrick SJ, 437 Dyment PG, 359, 371

# E

Eagan RT, 203, 451
Edmonson JH, 451
Einhorn L, 769
Einstein AB, Jr, 1131
El-Asfouri S, 843
El-Merzabani MM, 367
El-Morsi B, 367
Emanuel NM, 888
Engeler J, 767
Enot J, 327
Ertel I, 351
Espinoza JV, 457
Evans A, 1015
Evans A, 1015
Ezdinli E, 333

# F

Faber PJ, 287 Fefer A, 1131 Fernbach DJ, 395 Finklestein JZ, 351, 571, 975, 1015 Finn C, 279 Firat D. 1021 Fischer RG, Jr, 287 Fleischman RW, 467 Fliegelman MJ, 531 Fortuny IE, 401 Fossieck BE, Jr, 1171 Francis RS, 1039 Frei E III, 389 Freireich EJ, 769 Friedman AE, 233 Froufe A, 1025 Frytak S, 405 Fukushima K, 309 Furlow WL, 203 Furner RL, 717

# G

Gaeta JF, 195 Gad-el-Mawla N, 367 Galbraith WM, 1019, 1061 Gang M, 689

Gangji D, 1173 Gaston MR, 697 Gehrke CW, 721, 1103 Geiser CF, 385 George SL, 395, 437 Geran RI, 729 Gibbons RP, 195 Glasofer ED, 547 Glidewell O, 557 Glucksberg H, 1131 Goldin A, 697, 967 Gomolka DM, 127 Gonzalez-Palacios F. 1025 Gordon BS, 891 Gormley PE, 1039 Gottlieb JA, 621, 665, 769 Gralla EJ, 523, 1071 Gray HB, Jr. 611 Grayhack JT, 139 Gross JF, 819

# H

Hadd HE, 119 Hahn RG, 405, 451, 577, 581, 761 Hall LM, 629 Hammond D, 351, 989, 1097 Han T. 157 Hanka LJ, 459 Hanley JA, 333 Hansch C, 327 Hansen HH, 751, 1027 Harada S, 919 Haraphongse M, 1139 Harris PA, 819, 985 Hasselback R, 537 Haut A, 1163 Henry MC, 447 Hensleigh D, 421 Herson J. 3 Heshmat MY, 3 Hessellund M, 1027 Heston WDW, 185 Hill AS, 1131 Hill JM, 629, 647 Hill NO. 647 Hitannant S, 1167 Hittle R, 1015 Holland JF. 557 Holoye PY, 377, 433, 563, 1159 Hoogstraten B, 1163 Horoszewicz JS, 39, 89 Horton J, 333, 1127 Houchens DP, 697, 967 Howard HTC, 585 Howard R, 611 Howden MEH, 585 Howe KE, 629 Hueser JN, 1103 Huff J, 1131 Hum GJ, 1177

Humphrey GB, 359, 395 Hutchison DJ, 515, 935 Hutchison GB, 57

### 1

Ihde DC, 1039 Iorio A, 967

# J

Jackson AG. 3 Jackson MA, 3 Jackson RA, 887 Jacobs SA, 721 Jaffe N, 389 Jao-King C, 1139 Javaram HN, 481 Johnson DE, 17, 195, 433, 563, 1159 Johnson RK, 697 Johnston CL, Jr, 105 Joiner J, 195 Jonas AM, 523, 1071 Jones GW. 3 Jones SE, 887 Jönsson G, 229 Jungi WF, 737 Jurkowitz L, 333

# Κ

Kabra P. 327 Kaighn ME, 59 Kane RC, 1171 Kapadia A, 843 Kapoor SK, 3 Karakousis C, 1035 Karon M. 989 Kashgarian M, 1071 Kaufman J, 1007 Kelly F, 47 Kenis Y, 1173 Kennedy J. 3 Kennedy BJ, 401 Khaliq A, 769 Khan A, 647 Kimball AP, 611, 661 King JJ, 647 Kirdani RY, 175 Kishi T, 919 Kjobech C, 1131 Klein E. 157 Klemperer M, 1015 Kline I, 689 Kolarić K, 1051 Komp D, 341, 371, 395 Koontz WW, Jr, 105 Korman NP, 888 Kostinas J, 767 Kovi J, 3 Krakoff IH, 1151 Kuentzel SL, 459 Kuo KC, 721, 1103

Kurnick JE, 1147 Kyle RA, 557

### E

Lacave AJ, 1025 Lakings DB, 721, 1103 Land VJ, 371 Lane DM, 359 Lane M, 425, 1163 Lanzotti VJ, 437 Laster WR, Jr. 951 Lee SH, 661 Lehane DE, 1163 Leikin S. 1015 Leme PR, 811 Levi JA, 1043 Levin VA, 327 Lieberman DZ, 629 Lin H, 319, 895 Lincoln TL, 861 Liss RH. 501 Lloyd HH, 267 Loeb E. 647 Lokey JL, 767 Lokich JJ, 389 Lomen PL, 1123 Longeval E, 1173 Loo TL, 775, 843 Lucas AO, 3 Lutz RJ, 795 Lynm D, 233

### M

MacLellan A, 647 Magrath IT, 1155 Mahmoud ME, 367 Malinin TI, 91 Manak RC, 459 Manaster J, 537 Mansy S, 287 Manthei RW, 547 Marciniak TA, 577, 581, 761 Maruyama K, 17 Mastrangelo MJ, 1181 Matsumoto T, 919 Mayer SM, 929 Meares EM, Jr, 165 Mehta BM, 515, 935 Mellett LB, 717, 1061 Merchant D, 65 Merker PC, 729 Merriam P, 467 Merrin C, 97, 157 Meshnik R, 571, 975 Meyers MB, 515 Mittelman A, 219, 333, 751, 1007 Mitus JW, 385 Moertel CG, 405, 577, 581, 761, 1103 Moncure CW, 105 Morrison PF, 861 Mostofi FK. 111

Movassaghi N, 989, 1097 Moxley TE, 459 Muggia F, 751 Mullins GM, 411 Munchausen LL, 643 Murphy GP, 1, 97, 157, 175, 195, 219 Myers RP, 203

# Mc

McInnis B, 843

### N

Neely M, 327
Neil GL, 459, 481, 501, 1123
Neiman PE, 1131
Newman AD, 629
Newton WA, 17
Nilprabhassorn P, 1167
Nilsson T, 229
Nissen NI, 1027
Nitschke R, 371
Nkposong EO, 3
Nkrumah FK, 1155
Norman RL, 257
Noyes WF, 67

### 0

Ochoa M, Jr, 1151 O'Connell MJ, 443 Odujinrin OO, 1091 Ohtsuki Y, 17 Olisa E, 3 Olweny CLM, 721 Ootsu K, 919 Osbaldiston GW, 523, 1071 Osman A, 367 Ostrovskaya LA, 888 Ostrowski W, 97

# P

Palyi I, 493 Paul BD, 233 Paulson DF, 51 Peale A, 985 Pedersen H. 1027 Peresie HJ, 287 Perkins IV, 1155 Perlia CP, 995 Perlin E, 767 Piel IJ. 995 Pinkerton D, 341 Piver MS, 1157 Plapinger RE, 233 Pontes JE, 147 Popović S, 1051 Porcile G, 890 Pratt C, 743 Pretlow TG II, 143 Prout GR, 195 Pugh RP, 1031 Pullen DJ, 359

# R

Ragab AH, 359 Rahn RO, 643 Rainen L, 611 Rakieten N, 891 Rapp F, 33 Ray GR, 165 Razek AA, 395 Reed A, 989, 1097 Reich C. 51 Reich SD, 677 Reid JW, 767 Reitemeier RJ, 405, 577, 581, 761 Reiter W. 765 Ridgway H, 629 Riva A, 1161 Rivas A, 1025 Rivera G, 743 Robinson WA, 1147 Rodriguez A, 457 Rodriguez L, 1159 Roesler AR, 447 Rohner TJ, 33 Rose NR, 147 Rosenberg B, 287, 589 Rosenberg PJ, 377 Rossi A, 1161 Rosso R, 890 Roth A. 1051 Rudders RA, 421 Ryan JA, 481 Ryssel HJ, 429

# S

Sadee W. 279 Sakurai Y, 367 Salem P, 1117 Salmon SE, 345 Salzman JR, 165 Samson MK, 1123 Samuels ML, 377, 433, 437, 563, 1159 Sandberg AA, 175 Sanford EJ, 33 Saroff J, 195 Sato G. 47 Sawarnkatata P, 1052 Sawicki WL, 523 Schabel FM, Jr, 261, 951 Schaeppi U, 467 3chechter JP, 887 Schimpff SC, 1055 Schmidt JD, 195 Schneyer CA, 1019 Schutt AJ, 405, 577, 581, 761 Scott WW, 195 Selawry OS, 751, 1001 Seligman AM, 233 Seligman BR, 557 Seman G, 17 Senn HJ, 737 Serio G, 611

Shah KV, 51 Shannon WA, Jr, 233 Sharief Y. 51 Shukla SK, 219 Sieber SM, 599, 915 Sieper WJ, 1181 Silver RT, 557 Simon R, 1155 Sitarz AL, 989, 1097 Skovsgaard T, 301 Sloan WR, 185 Smith F, 1117 Smith MJV, 105 Smith P, 209 Smith TL, 377 Sonntag RW, 429 Speer RJ, 629 Sponzo RW, 1127 Stadnicki SW, 467 Stambaugh JE, 547 Stephens RL, 1163 Sternberger NJ, 233 Stewart DP, 629 Stolinsky DC, 1031 Strøyer I, 1027 Stryckmans P, 1173 Stuckey WJ, 395 Sutow WW, 341 Swiniarski JK, 939

### 1

Talley RW, 425, 1117
Tashima CK, 441
Taylor SG III, 333
Taylor SG IV, 1127
Tejada F, 243, 751, 1001
Tekuzman G, 1021
Theologides A, 401
Thomas ED, 1131
Tittle K, 571, 975
Tormey DC, 1103
Toyoshima S, 309
Tranum BL, 1163
Troetel WM, 547
Trouet A, 260
Tucker WG, 425

# U

Umsawasdi T, 1052, 1167

Urtasun RC, 1139 Utz DC, 203

# ٧

Vaitkevicius VK, 1117 Valeriote F, 895 VanCamp L, 287 Varkarakis MJ, 97, 175 Venditti JM, 689 Vergara JR, 51 Vietti TJ, 341 Viranuvatti V, 1167

# W

Waalkes TP, 721, 1103 Wajsman Z, 157 Walcroft MJ, 319 Wallace HJ, Jr, 557 Ware DE, 1147 Wasserkrug HL, 233 Weiner J, 571, 975, 989, 1097 Weiss AJ, 547 Welvaart K, 219 Wheeler DMS, 258 White M, 1147 Wiernik PH, 443, 1043 Wiig KM, 847 Williams AO, 3 Wilson CB, 327 Wittes RE, 1151 Wodinsky I, 729, 939 Woo KB, 847 Woodman RJ, 689 Woods WA, 531

# Y

Yamanaka H, 175

# Z

Zaharko DS, 795 Zbinden G, 707 Zeigel RF, 39 Ziegenfuss J, 547 Ziegler JL, 1155 Zumwalt RW, 721, 1103